

## **Last autochthonous Alpine pigs found! Opportunities for sustainable Alpine farming?**

### **On today's Alps, pigs are usually kept inside**

In the last hundred years, we have lost almost all of our Alpine breeds of pigs. Only in northern Italy some relic stocks remained until recently. Pig keeping has not stopped - today pigs are taken on Alps with cows to use the whey - but the pasturing of pigs has changed radically. Why?



- The modern performance breeds, due to their body type, are no longer suitable for grazing on mountain pastures (short-legged, long and heavy body).
- Today's pink breeds have little skin pigments and cannot tolerate the strong UV light of the Alps. They quickly start suffering from sunburn (dangerous!)
- Today's breeds must be protected from the harsh weather conditions, large temperature differences and the rapid climate change in the Alps.
- Today's expensive care costs must be kept low.

### **Conclusion:**

The modern animals will still continue to be sporadically taken for use of whey on the cow alps, but there are usually only kept inside and fed on additional cereals. They no longer have much in common with the original, extensively grazed pigs in the Alps.

In some places, tests are performed with wooly pigs which are not susceptible to sunburn. Wooly pigs are, however, lowland animals. Although they can be kept extensively they are not really suitable for mountains. Because of their morphology and properties, they provide only a partial solution.

### **The old breeds were used in free range systems**



The previous Alpine pig breeds were dark in colour, had a dense bristle dress and a thicker skin. They were thus sunburn resistant and particularly adapted to the extreme weather conditions in the mountains. As extensively held grazing pigs they adapted to life on mountain pastures. The old breeds were not only whey users, but also ate the roughage on inferior pastures. They represented a cultural good and also had an immense importance for the economy and ecology of the Alps:

**- Economy:**

In an alp season from mostly about 90-100 days, the pigs took advantage of the large diversity of mountain grasses and herbs. The content-rich, aromatic plants (eg mountain plantain, alpine meadow-grass, thyme, yarrow, etc.) gave the meat of the pig a unique taste that would be label-worthy today. The inclusion of green fodder on the alp enriched the meat of the pigs with the valuable omega n3 fatty acids, which are missing in modern pork. Due to the constant movement of the animals and the slower growth by extensive farming, the meat was also more compact and the fat as a flavour-carrier was better distributed in the body (marbling). The old breeds were also characterized by great robustness, were used to life in the open field and needed therefore hardly needed great care (and no drugs).

**- Ecology:**

The pigs were kept in places that were nutritionally worthless to the cows where they grazed the plants on the over-fertilized soils or caused by their digging a partial improvement of the pasture vegetation. Fields overrun with docks were often used for the feeding of the mountain pig (which are fought with chemicals today) and the pigs were allowed to freely dig in the ground (roots, mice, beetle-grubs). Thus, the weeds were counteracted and the floor that was compacted by cattle hooves was loosened.



**- Cultural:**

The traditional Alpine pigs are a living heritage of the Alps. They were part of the former indigenous agricultural mountain-agriculture. Some breeds were used as a fat supplier (an important energy source for the hard-working mountain people, lard reserves for times of emergency, ...), other were particularly kept as meat suppliers and selected accordingly. This technically and genetically caused differences and led to a really widely-scattered biodiversity in pigs herds of the valleys in the Alps. Due to the small spatial structure of the former economic areas this high biodiversity has been developed over many generations and also conserved. The respective inhabitants of the Alps had their pig breed, which could be best kept with the farm's own feed.

**- Animal welfare / nutrition:**

Today the animals are mainly fed with whey and energy- and protein-rich cereals and soy feed mixtures similar to the fattening farms in the valley. This causes a unilateral, protein-rich feeding, can be regarded as inappropriate for the species and, also for humans, as nutritionally questionable. Inside, the animals cannot live out their species-specific needs (movement, rooting, ..).

⇒ **The last Alpine pig breeds exist as part of the Alps unique agrobiodiversity, they are a genetic treasure that must be preserved for posterity.**

## Breeding the last autochthonous Alpine pigs – A chance for sustainable Alpine farming!

Once, each region had its own locally adapted breeds. These belonged (as with their building style) to their cultural heritage. Cross-breeding and performance driven breeding has displaced these breeds in the last 80-90 years. Unlike sheep, where many traditional breeds were conserved, the loss in the pigs was dramatic. Today there are almost only the standard, pink pigs. This has also led to a radical change to the Alpine pasturing of pigs.



*Grisons or Valtellina pigs on the Andossi-Alps, on the Spluga passroad (Photo Vinciguerra, ca. 1980)*

Due to their physique (short-legged, long and heavy body) the modern performance breeds are not suitable for grazing mountain pastures. The pink animals with their lack of skin pigmentation cannot tolerate the strong UV light of the Alps. They very quickly develop sunburn, which can be dangerous. They must be protected from weather changes, large temperature differences and rapid climate change in the harsh alpine climate. The modern animals often are taken along to the cow-alps to consume whey from cheese-making, but they are mostly kept in sheds and fed with additional cereals. They do not have much in common with the original, extensive grazing pigs.

At the end of May 2013, Dr. Alessio Zanon from the Veterinary University of Parma and pig expert of the Italian organization for the conservation of endangered livestock breeds (RARE), informed the European SAVE Foundation that a group of small, black Valtellina pigs had survived in a Fattoria Didattica (didactic farm), but were unfortunately very endangered. He asked SAVE to make conservation measures (Valtellina pigs are identical to the earlier Grisons pigs in Switzerland). In the knowledge that a breed can be extinct before all the animals are dead, the Network "Pro Patrimonio Montano" (for old Alpine breeds) spontaneously took over animals and is now building up the breed. Since the Valtellina pigs are the last real Alpine pigs and are differentiated from the larger, also almost extinct pigs in the Po Valley (Mora Romagnola, Nero di Parma), at least the ecotype of this mountain pig must be conserved. In this ecotype other relics of the pigs of the southern Alpine region will be merged. Meanwhile, more individual animals and groups have been found (e.g. from Samolaco pigs).

## Possibilities

The Black Alpine pig represents a pig that can be raised on the Alp and is a robust, pasture animal, as was common in the Alps before the promotion of high-input performance breeds. In an alp season of about 90-100 days, the pigs took advantage of the large diversity of mountain grasses and herbs. The nutrient-rich, aromatic plants (eg mountain plantain, alpine meadow-grass, thyme, yarrow, etc.) gave the meat of the pig a unique taste that would label-worthy today. The inclusion of green fodder on the alp enriched in the meat with the valuable omega n3 fatty acids, which are missing in modern pork. Due to the constant movement of the animals and the slower growth by extensive farming, the meat was also more compact and the fat, as a flavour carrier, better distributed in the body (marbling). The old breeds also were characterized by great robustness, were used to life in the open field and needed therefore little care (and no medicines).

The project "Black Alpine Pigs" aims to set the qualities of this type in a market niche. Products from extensive farming, traditionally prepared, with high taste qualities and regionally produced have a future and are marketed with special labels. The aim of the project is to breed grazing pigs that can be raised on the alp and have a moderate fat quantity.

## Project “Black Alpine Pigs” (suino nero delle alpi)



Most indigenous pig breeds in the Alps are already extinct. A few relict specimens in different valleys have survived. But they cannot be conserved on their own. The project brings them together in a gene pool and conserves them together. Since they are all black or black-spotted animals, breeding takes place under the name "Black Alpine pig", a name that was already used in old literature for the community Alps black pigs (e.g. JR Steinmueller, 1827). The Black Alpine pig is now a composite breed, but is based on actual remains of Alpine breeds. The project aims at a marketable animal that provides an opportunity for a sustainable Alpine farming again.

Within a year the last animals of the Valtellina and Samolaco-pigs were brought together. By end-2018 there are 52 breeding groups, 35 in the mountains of the Italian Alps, 10 in Austria, 3 in the Alps of southern Bavaria and 4 in Switzerland. The herd register of Pro Patrimonio Montano is with 160 animals, based on 4 boars and 8 sows lines. Search tours to find additional relict populations shall further widen the genetic base for the breed.

**We are active and are counting on your support, thank you!**

=> [www.patrimont.org](http://www.patrimont.org)

*For donations: Alpine Network Pro Patrimonio Montano, CH-9000 St.Gallen/Switzerland  
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